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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,726	04/28/2000	Takeshi Higuchi	M1717-18	5239

7590 01/07/2002

Morrison Law Firm  
145 North Fifth Avenue  
Mount Vernon, NY 10550

EXAMINER
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BEACHAM, CHRISTOPHER R

ART UNIT	PAPER NUMBER
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2641

DATE MAILED: 01/07/2002

#5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/560,726

Applicant(s)

HIGUCHI, TAKESHI

Examiner

Christopher R Beacham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 9-14 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-8 is/are rejected.
- 7) ☒ Claim(s) 6 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The disclosure is objected to because of the following informalities: On page 1, second paragraph, "motor an output" should be --motor output--. On page 2, second paragraph, "which using" should be --by using--; "by PWM method" should be --by the PWM method--; and "capstan, prevents" should be --capstan, which prevents--. On page 10, second paragraph, "resin as the screw" should be --resin at the screw--. On page 13, second paragraph, "52 and insulating sheet 53, and" should be --52, the--. Appropriate correction is required.

### ***Claim Objections***

3. Claims 6 and 14 are objected to because of the following informalities: Referring to claims 6 and 14, "The tape deck which" should be --A tape deck which--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-3 and 6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (US Patent Number 6,147,833) in view of Zenzefilis (US Patent Number 3,881,188). Regarding claim 1, Watanabe shows a deck chassis (21; Figure 4); a pinch roller (62; Figure 4); a capstan axis (61; Figure 4); a motor (25; Figure 4) which is mounted on the deck chassis for driving the capstan axis; a cylinder drum (26; Figure 4) which is mounted on the deck chassis and provided with a head for magnetic-recording and playing on the tape, wherein the motor is a direct driving motor in which the motor shaft is directly coupled to the capstan axis and is controlled by current switching (column 29, lines 8-19). Watanabe does not show the motor electrically insulated from the deck chassis. This feature is taught by Zenzefilis (126; Figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to electrically insulate the motor of Watanabe on the deck chassis as taught by Zenzefilis. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to electrically insulate the driving motor of Watanabe as taught by Zenzefilis in order to reduce the switching noise that contains frequency elements of a video band and a sound band so that video screen noise and audio noise is decreased.

Regarding claims 2 and 3, Watanabe discloses a direct driving motor that is controlled by pulse width modulation (PWM) control (column 29, lines 8-19).

Regarding claim 6, Watanabe discloses a tape deck, which comprises a driving motor that is controlled by pulse width modulation (PWM) control (column 29, lines 8-19).

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6. Claims 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (US Patent Number 6,147,833) and Zenzefilis (US Patent Number 3,881,188) as applied above, and further in view of Koh et al (US Patent Number 5,729,407). Regarding claims 5 and 7, Watanabe and Zenzefilis show all the features except the cylinder drum mounted on the deck chassis through an insulator. This feature is taught by Koh et al (column 6, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the cylinder drum of Watanabe in view of Zenzefilis on the deck chassis through an insulator as taught by Koh et al. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to mount the cylinder drum of Watanabe in view of Zenzefilis on the deck chassis through an insulator as taught by Koh et al in order to reduce the cylinder drum vibration during operation.

Regarding claim 8, Watanabe discloses a direct driving motor that is controlled by pulse width modulation (PWM) control (column 29, lines 8-19).

***Allowable Subject Matter***

7. Claims 4 and 9-14 are allowed.

***Conclusion***


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koh et al (US Patent Number 5,936,793) shows a capstan motor for a magnetic recording and reproducing apparatus.


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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Beacham whose telephone number is (703) 605-4256. The examiner can normally be reached on M-F, 8:00 am-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

  
Christopher R. Beacham  
January 3, 2002

  
WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800